Amendments to the Specification:

Pursuant to 37 C.F.R. § 1.121(b) kindly amend the specification as follows. Amendments to the specification are made by presenting replacement paragraphs or sections marked up to show changes made relative to the immediate prior version. The changes in any amended paragraph or section are being shown by strikethrough (for deleted matter) or underlined (for added matter).

On page 2, lines 12-21, please change the following:

As indicated above, this invention is directed to "liquid" (as distinguished from "gas") type hydraulic machines and it should be understood that the terms "fluid(s)" and "pressurized fluid(s)," as used herein throughout the specification and claims, are intended to identify incompressible liquids rather than compressible gasses. Because of the incompressibility of liquids, the pressure and load duty cycles of the these two different types of hydraulic machines are so radically different that designs for the gas compression type machines are inappropriate for use in the liquid-type machines, and visa versa. Therefore, the following remarks should all be understood to be directed and applicable to liquid-type hydraulic machines and, primarily, to such heavy duty automotive applications as those identified in the Technical Field section above.

On page 2, line 22 to page 3, line 9, please change the following:

Hydraulic machines with fixed cylinder blocks can be built much lighter and smaller than the machines that must support and protect heavy rotating cylinder blocks. However, these lighter machines require rotating and nutating swash-plate assemblies that are difficult to mount and support. For high-pressure/high-speed service, the swash-plate assembly must be supported in a manner that allows for the relative motion between the heads of the non-rotating pistons and a mating flat surface of the rotating and nutating swash-plate. As just indicated above, such prior art swash-plates have often been split into a rotating/nutating rotor portion and a nutating-only wobbler portion, the latter including the flat surface that mates with the heads of the non-rotating pistons through connecting "dog bones". ~~As is well known in the art, this relative motion follows varying non-circular paths that occur at all inclinations of the swash-plate away from 0°.~~

On page 3, lines 10-19, please change the following:

~~Also~~ That is, such fixed-cylinder-block machines have heretofore used a "dog-bone" extension rod (i.e., a rod with two spherical ends) to interconnect one end of each piston with the flat surface of the nutating-but-not-rotating wobbler. One spherical end of the dog bone is pivotally mounted into the head end of the piston, while the other spherical end is usually covered by a pivotally-mounted conventional "shoe" element that must be held at all times in full and flat contact against the flat surface of the swash-plate wobbler during all relative motions between the heads of the non-rotating pistons and a mating flat surface of the nutating swash-plate. As is well known in the art, these relative motions follow varying non-circular paths that occur at all inclinations of the swash-plate away from 0°. These dog-bones ~~just-mentioned elements~~ greatly increase the complexity and cost of building the rotating swash-plates of these lighter machines.

On page 5, lines 7-17, please change the following:

The invention is disclosed on various embodiments of hydraulic machines, all of which share a novel combination of simple structural features including elongated pistons reciprocating in a fixed cylinder block, cylinders provided with unique lubrication recesses, and shoes directly attached to each piston ~~(without dog bones)~~ (*without dog bones*) that make sliding contact with a rotating and nutating swash-plate or, preferably, with the nutating-only wobbler portion of a split swash-plate. These simple structural features synergistically result in (a) a remarkable 90% increase in volumetric efficiency and (b) such increased mechanical efficiency that even the drive shafts of machines as large as 12-cubic inch capacity can be easily turned by hand when the machine is fully assembled.

On page 6, lines 7-20, please change the following:

In each machine according to the invention, each piston is elongated, having an ~~axial~~ axially cylindrical body portion that preferably is substantially as long as the axial length of the respective cylinder in which it reciprocates. Preferably, each piston also has a spherical head end that, by means of a conventionally pivoted shoe and relatively simple apparatus, is maintained in effective sliding contact with a flat face of the machine's swash-plate. The axial length of each

cylindrical piston body is selected to assure minimal lateral displacement of the spherical first end of the piston at all times. Therefore, the preferable piston for this invention is "elongated"; ~~that~~. That is, even when each piston is extended to its maximum stroke, that portion of the piston body which is still supported within its respective cylinder is sufficient to assure a minimal lateral displacement of the extended spherical end of the piston at all times during machine operation.

On page 6, line 21 to page 7, line 10, please change the following:

[NOTE: To facilitate explanation of the invention, each piston is described as having an axial cylindrical body portion and a spherical head end, while each respective cylinder has a valve end and an open head portion beyond which the spherical head end of each piston extends at all times. Further, for all preferred embodiments, it is assumed that each disclosed hydraulic machine (e.g., whether motor or pump) is paired with a similar hydraulic machine (e.g., a mating pump or motor) in a well known "closed loop" arrangement (see FIG. 10) wherein the high-pressure fluid exiting from the outlet 139 of each pump 110 is directly delivered to the input 36 of the related motor 10, while the low-pressure fluid exiting from the outlet 37 of each motor 10 is directly delivered to the input 136 of the related pump 110. As understood in the art, a portion of the fluid in this closed loop system is continually lost to "blow-by" and is collected in a sump; and fluid is automatically delivered from the sump back into the closed loop, by a charge pump, to maintain a predetermined volume of fluid in the closed loop system at all times.]

On page 14, after line 2, please add the following paragraph:

FIG. 10 is a view of a prior art "closed loop" arrangement of two hydraulic machines.

In the Abstract, please change the following:

Smaller and lighter hydraulic pump/motors provide remarkably improved volumetric efficiency with pistons having body portions substantially as long as the axial length of the respective cylinders in which they reciprocate. A plurality of respective lubricating channels~~, formed circumferentially and radially transecting the walls of each cylinder, are each positioned to be almost completely closed at all times by the axial cylindrical body of each respective piston during its entire stroke. Each lubricating channel is interconnected, one to another, to~~ form a single, continuous lubricating passageway entirely within the cylinder block and not connected by either fluid "input" or fluid "output" passageways, being replenished solely by a minimal flow of fluid ~~entering~~ to and from the valve end of each cylinder and passing between each respective cylindrical wall of each cylinder and the axial cylindrical body of each respective piston. Several embodiments are disclosed in combination with various spring-biased hold-down assemblies. The preferred embodiment includes a fixed cylinder block, a roller bearing mounting between the wobbler and rotor of a split-swash plate, with piston shoes contacting the wobbler directly without any intermediary apparatus.